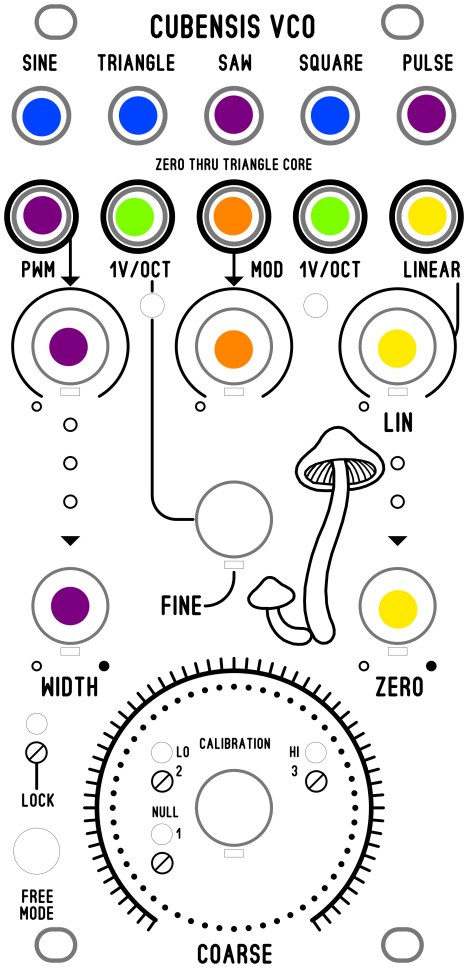
BLM CUBENSIS VCO



Purple: Saw, Pulse, pulse width modulation (PWM), and width knob. All of these are related to the same circuit. The Width Knob will affect the saw and pulse waves. PWM input jack is a cv input to modulate the width knob.

Yellow: FM Linear and Zero Offset knobs. This is the Zero Through CV portion of this module. The Zero knob is set to 12 o'clock for the default setting. You can offset using this knob. Just try it out and experiment. LIN input is an input attenuator for the incoming signal.

Orange: this is an exponential cv input with input level control.

Green: 1v/ octave inputs. These can be used for musical tracking.

Blue: Sine wave, triangle wave, square wave outputs can be used simultaneous.

Toggle switch: Free Mode and Lock Mode. Free mode lets you use the big knob to frequency tune. Lock mode uses the small trimmer to tune the vco. This is not a calibration trimmer. The lock feature is used for quick tuning so that you don't always have to manually find a frequency with the big black knob. Most people tune the vco to low note C when 0V or nothing is patched into the 1V/OCT inputs. In other words in lock mode, tune the frequency to low note C with nothing patched into the 1v/octave inputs.

Fine Knob is a fine tune parameter used to help adjust the frequency. This works in both modes.

Calibration: You have to remove the big black knob to reach the trimmers. The big black knob has a set screw. The set screw will either be flat head screw driver or hex type.

NULL: this trimmer is for the zero through linear 'Zero' adjustment. By monitoring one of the wave outputs, sweeping the Zero offset knob should give minimal movement. If it is causing too much movement, you can adjust the NULL trimmer to minimize the movement. The NULL trimmer has nothing to do with 1v per octave tracking.

Lo and HI trimmers are for adjusting the 1V per Octave converter for musical tracking.